

VIA CERTIFIED MAIL

Mr. Thomas G. Swaney  
Philips Products, Inc.  
3221 Magnum Drive  
Elkhart, Indiana 46516

Dear Mr. Swaney:

Re: Exempt Construction and Operation Status,  
**CP 039-12022-00535**

The application from Philips Products, Inc., received on March 14, 2000, with additional information received on June 20, 2000, has been reviewed. Based on the data submitted and the provisions in Sections 1 and 2 of 326 IAC 2-1, it has been determined that the following door core manufacturing operation, to be located at 1000 Sako Court, Elkhart, Indiana, 46516, is classified as exempt from air pollution permit requirements:

- (a) One (1) wood stiles assembly area, with a maximum capacity of 125 doors per hour, equipped with one (1) baghouse for particulate control;
- (b) One (1) door core foam filling operation; and
- (c) Four (4) volatile organic compound (VOC) storage tanks, each with a maximum capacity of 2,000 gallons, each with an annual throughput of 35,000 gallons per year.

*Note: MDI (a VOC and HAP) emissions from door core foam filling operation are 0.004 pounds per hour which is below permitting level. Methodology provided by The Society of the Plastic Industry, Inc., 1992 document, was used to calculate these emissions.*

The following conditions shall be applicable:

1. 326 IAC 6-3-2 (Process Operations)  
The particulate matter (PM) from the wood stiles assembly area shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

$$E = 4.10(0.3815^{0.67}) = 2.15 \text{ lb/hr}$$

Based on the above equation, particulate matter emissions from the one (1) baghouse shall be limited to 2.15 lb/hr.

The baghouse shall be in operation at all times that the wood stiles manufacturing operation is operating to comply with 326 IAC 6-3-2.

See Appendix A (page 1 of 1) for PM emission and compliance calculations.

2. 326 IAC 5-1 (Opacity Limitations)  
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this approval:
  - (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
3. 326 IAC 2-7 (Part 70 Permit Program)  
This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:
  - (a) each criteria pollutant is less than 100 tons per year,
  - (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
  - (c) any combination of HAPs is less than 25 tons/year.

This exemption is the first air approval issued to this source.

Any change or modification which may increase the potential PM emissions to five (5) tons per year or more, or VOC emissions to ten (10) tons per year or more, from the equipment covered in this exemption must be approved by the Office of Air Management (OAM) before such change may occur.

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

LQ/EVP

cc: File - Elkhart County  
Elkhart County Health Department  
Air Compliance Section Inspector - Greg Wingstrom  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michelle Boner

## **Indiana Department of Environmental Management Office of Air Management**

### **Technical Support Document (TSD) for a New Source Construction and Exemption**

#### **Source Background and Description**

**Source Name:** Philips Products, Inc.  
**Source Location:** 1000 Sako Court, Elkhart, IN 46516  
**County:** Elkhart  
**SIC Code:** 3442  
**Operation Permit No.:** 039-12022-00535  
**Permit Reviewer:** LQ/EVP

The Office of Air Management (OAM) has reviewed an application from Philips Products, Inc. relating to the construction and operation of a steel door manufacturing plant.

#### **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (a) A wood stiles assembly area equipped with one (1) baghouse for particulate control;
- (b) One (1) door core foam filling operation; and
- (c) Four (4) volatile organic compound (VOC) storage tanks, each with a maximum capacity of 2,000 gallons, and each with an annual throughput of 35,000 gallons per year.

*Note: The source will not be constructing the one (1) spray paint booth originally listed in the application.*

#### **Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted facilities operating at this source during this review process.

#### **Enforcement Issue**

There are no enforcement actions pending.

#### **Recommendation**

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on March 14, 2000, with additional information received on June 20, 2000

### Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1-1).

### Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	0.01
PM-10	0.01
SO <sub>2</sub>	0.0
VOC	0.0
CO	0.0
NO <sub>x</sub>	0.0

HAP's	Potential To Emit (tons/year)
MDI	0.02
TOTAL	0.02

### Actual Emissions

No previous emission data has been received from the source.

### County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	maintenance
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as maintenance for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

## Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.01
PM10	0.01
SO <sub>2</sub>	0.0
VOC	0.0
CO	0.0
NO <sub>x</sub>	0.0
Single HAP	0.02
Combination HAPs	0.02

- (a) This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

## Part 70 Permit Determination

### 326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

## Federal Rule Applicability

- (a) The four (4) volatile organic (VOC) storage tanks are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb), because each tank is less than forty (40) cubic meters (m<sup>3</sup>).
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

## State Rule Applicability - Entire Source

### 326 IAC 2-6 (Emission Reporting)

This source is located in Elkhart County and the potential to emit VOC and NO<sub>x</sub> is less than ten (10) tons per year. Therefore, 326 IAC 2-6 does not apply.

### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emission Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Visible emissions shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

- (b) Visible emissions shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### State Rule Applicability - Individual Facilities

#### 326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the wood stiles assembly area shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

$$E = 4.10(0.3815^{0.67}) = 2.15 \text{ lb/hr}$$

Based on the above equation, particulate matter emissions from the one (1) baghouse shall be limited to 2.15 lb/hr.

The bag house shall be in operation at all times the wood stiles assembly is in operation, in order to comply with this limit.

#### 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)

Pursuant to 326 IAC 8-9-1 (a) and (b), stationary vessels used to store volatile organic liquid, located in Clark, Floyd, Lake, or Porter County, and are less than thirty-nine thousand (39,000) gallons, are subject to the reporting and record keeping provisions of 326 IAC 8-9-6(a) and (b). This rule does not apply to the four (4) volatile organic compound (VOC) storage tanks because the source is located in Elkhart County.

### Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.

### Conclusion

The construction and operation of this steel door manufacturing plant shall be subject to the conditions of the attached proposed New Source Construction and Exemption Permit 039-12022-00535.

**Appendix A: Process Particulate Emissions**

**Company Name:** Philips Products, Inc.  
**Address City IN ZIP:** 1000 Sako Court, Elkhart, IN 46516  
**CP:** 039-12022-00535  
**Pit ID:** 039-00535  
**Reviewer:** Linda Quigley/EVP  
**Date:** June 21, 2000

Potential Emissions (tons/year)						
<b>A. Baghouse</b>						
Process	No. of Units	Grain Loading per Actual Cubic Foot of Outlet Air	Air to Cloth Ratio Flow (acfm/ft <sup>2</sup> )	Total Filter Area (ft <sup>2</sup> )	Control Efficiency	Total (tons/yr)
36PJD8	1	0.00010	9.2	358	99.90%	0.01
Woodworking						
Total Emissions Based on Rated Capacity at 8,760 Hours/Year						<b>0.01</b>

Methodology:Potential (uncontrolled):

Emissions (tons/yr) = No. Units \* Loading (grains/acf) \* Air/Cloth Ratio (acfm/ft<sup>2</sup>) \* Filter Area (ft<sup>2</sup>) \* 1 lb/7,000 grains \* 60 min/hr \* 8760 hr/yr \* 1 ton/2,000 lbs \* 1/(1-Control Efficiency)

Compliance Calculation: (0.01 tons PM/yr) \* (yr/8,760 hrs) \* (2,000 lbs/ton) = 0.003 lbs PM/hr < 2.15 lb/hr























































